Drowning in information?

Covid-19 information seeking behaviour and socioeconomic status during the first lockdown in Austria

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In times of a pandemic, media coverage is critical …

Primary source of **health information**

Connect health professionals, policymakers, and the public

Communicate **public health measures**

See also Mach et al. (2021), Pieri (2018), Laing (2012)

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... but with great power comes great responsibility

An **infodemic** is defined as:

- **Too much information** including **false or misleading information**

- Both **digital and physical** environments

- During a **disease outbreak**

- Causes **confusion and risk-taking behaviours** that can **harm health**

- Leads to **mistrust in health authorities** and **undermines the public health response**

World Health Organization (WHO) 2023

Socioeconomic/-demographic status and information sources are related to compliance with public health measures

Based on existing research …

Age: Lin et al. (2021), Choi et al. (2022), Norman et al. (2020), Nivette et al. (2021), Recio-Vivas et al. (2022), Morales-Vives et al. (2022)

Gender: Lin et al. (2021), Galasso et al. (2020), Choi et al. (2022), Nivette et al. (2021), Recio-Vivas et al. (2022), Ganslmeier et al. (2022), Morales-Vives et al. (2022)

Family status: Uddin et al. (2021), Ganslmeier et al. (2022), Morales-Vives et al. (2022)

Migration status: Nivette et al. (2021)

Ethnicity: Choi et al. (2022)

Employment: Uddin et al. (2021), Ganslmeier et al. (2022)

Education: Nivette et al. (2021)

Health literacy: Hermans et al. (2021), Rodon et al. (2022)

Information source: Kusama et al. (2022), Meppelink (2022), Morales-Vives et al. (2022)

… we aimed to answer two research questions

I — What is the association between **socioeconomic/-demographic status** and **Covid-19 information sources** in Austria?

II — What is the impact of **socioeconomic/-demographic status** and **Covid-19 information sources** on **agreement/compliance** with public health measures in Austria?
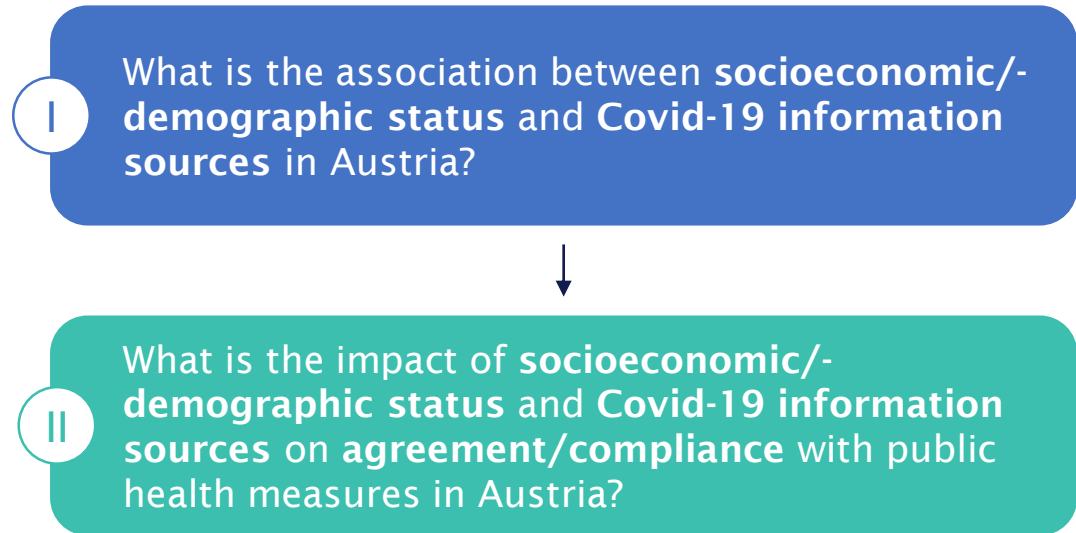
We analysed survey data referring to the first lockdown March 16th to April 15th, 2020

Data collection
- Online survey
- Convenience sampling
- Data collection May 27th to June 16, 2020
- N=559

Participation requirements
- German language skills
- >18 years
- Main residency in Austria
- Informed consent to participate

Statistical analysis
- Multinomial logistic regression models (research question I)
- Ordered logistic regression models (research question II)
- Control variable *Feeling well advised by the government* as a proxy for government trust introduced in both models

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TV (~37%) and News websites (~27%) proved to be the most popular main Covid-19 information sources

	Total	Percent	Female	Male	ISCED 2: Compulsory school	ISCED 3: Lehre, Fach-, oder Handels-schule	ISCED 3-5: Matura	ISCED 6-8: University
Preferred source of information								
TV	**205**	37%	157	48	3	57	47	98
Newspaper	**37**	7%	32	5	2	2	8	25
News websites	**153**	27%	105	48	1	13	42	97
Government websites	**46**	8%	35	11	2	10	9	25
Social media	**58**	10%	45	13	2	19	17	20
International guidelines (e.g., WHO)	**21**	4%	17	4	1	2	3	15
Other	**20**	4%	13	7	1	1	3	15
I do not want to answer	**6**	1%	3	3	1	4	0	1
missing	**13**	2%	9	4	0	5	3	5
Total	**559**	**100%**	**416**	**143**	**13**	**113**	**132**	**301**

~89%

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Participants showed on average higher compliance than agreement with measures
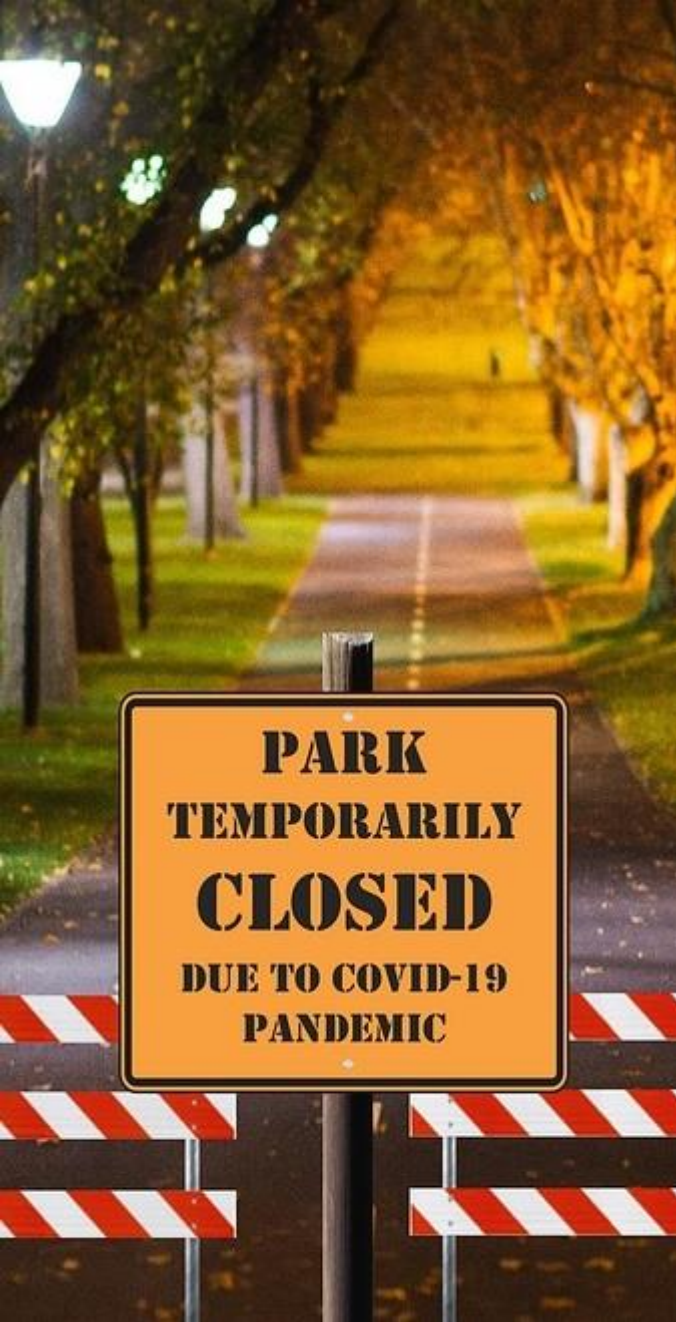
Agreement and compliance assessed on a 10-point Likert scale	Agreement	Compliance
Public health measure	*Mean (standard deviation)*	*Mean (standard deviation)*
Only necessary commuting	**7.68 (2.70)**	9.03 (2.28)
Leisurely walks only with household members	6.54 (3.03)	8.60 (2.45)
Only necessary shopping	7.34 (2.91)	9.06 (2.11)
No physical contact to non-household members	6.02 (3.16)	8.13 (2.71)
Mandatory masks in shops and on public transport	6.54 (3.40)	9.50 (1.64)

Lowest   Highest

Sources: https://pixabay.com/photos/park-closed-barricade-pandemic-5040260/

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A brief summary of our findings I/II

*What is the association between socioeconomic/-demographic status and **Covid-19 information sources** in Austria?*

Higher age ⇨ lower probability of using **News websites** and **Social media**

Being **retired** ⇨ higher probability of using **Newspaper**

Migration background ⇨ higher probability of using **News websites** and **Social media**

Controlling for **lacking trust in the government** confirms those findings and increases the probability of using **News websites** and **Social media**

All results compared to using TV as main Covid-19 information source

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A brief summary of our findings II/II

What is the impact of socioeconomic/-demographic status and Covid-19 information sources on **agreement and compliance** *with imposed public health measures in Austria?*

Female ⇨ **higher compliance** with 3/5 assessed public health measures

Lower degree of **education** ⇨ **lower compliance** with 3/5 assessed public health measures

Social media ⇨ **lower agreement** with all assessed public health measures

Controlling for **lacking trust in the government** confirms those findings and is associated with both **lower agreement** and **compliance** with all assessed public health measures

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Limitations

Generalization of our findings is limited due to **non-representative sample**

- Gender bias (>74% of study participants female)
- Education bias (>53% university degree)

Level of detail of assessed **information sources** only allows for limited conclusions regarding their quality

Compliance with measures **self-assessed** and therefore subject to personal over-/understatement

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Conclusion

I We find that in times of acute crisis, sociodemographic and socioeconomic factors affect information source selection

II Information sources in turn have an impact on agreement and thereby compliance with public health measures in addition to those factors

III Potential explanations include prevalence of unmoderated content, misinformation, and narratives of respective sources shaping opinions

IV Going forward, decision-makers should be wary of those associations and target vulnerable groups with accordingly planned information campaigns

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Thank you for your attention!

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